

## Reaching for the Sky: A History of Great Buildings

People have made buildings throughout human history. By studying the architecture of a society, you can better understand that society's values and beliefs. Every society has developed its own style of architecture. Many societies found ways to construct enormous buildings that were used for religious and social purposes.

Some of the most impressive early architects were the ancient Egyptians. They lived thousands of years ago in Egypt, a country in the northern part of Africa. The Egyptian pharaohs constructed huge buildings in the shape of pyramids to house their bodies after they died. Pharaohs ruled Egyptian society. They were like kings, but the Egyptians also believed that pharaohs had powers from the gods. The pharaohs thought that the pyramids would be their home after they died and filled them with furniture, gold jewelry and even pets. Now the ancient Egyptian society has vanished but the pyramids are still found in Egypt.

Today, pyramids all over Egypt stand as a reminder of the vanished ancient Egyptian culture. Over 130 pyramids have been discovered in Egypt. Egyptian pyramids have a square base with four triangular sides that rise up to a single point. Some of the pyramids are more than 4,500 years old. For thousands of years, the Egyptian pyramids were the tallest manmade structures in the world. The Great Pyramid of Giza is 480 feet above the ground. That's as tall as many of the skyscrapers in New York City. Historians believe that it took between 20,000 and 30,000 people to help build the Great Pyramid. The pyramid was built out of giant blocks of limestone, a type of rock found in Egypt. The rocks had to be brought from far away on boats on the Nile River.

One thousand years later, on the other side of the globe, the ancient Mayan civilization also decided to build pyramids. The Maya was a vast empire that stretched from Mexico to Central America. They understood astronomy and had very complex calendars that they used to mark the date and time. The Mayan pyramids looked different from the pyramids built by the ancient Egyptians. Instead of rising to a point, they had flat tops. Along the sides were tiers of steps.

The Maya built two types of pyramids. One type was for their religious ceremonies. Priests would climb to the top of the pyramids to conduct important ceremonies where the entire city could see. The other pyramids the Maya built were sacred structures. These pyramids were built to honor the gods and were not supposed to be used by anyone. Humans weren't

supposed to climb these pyramids, or even touch them. Though there were still steps that went up the sides of these pyramids, they were too steep to climb easily. The Maya also built tunnels and secret doors to trap people who might try to climb the sacred pyramids.

In medieval Europe, architects also wanted to build tall buildings for their religious ceremonies. In medieval times, religion was an important part of daily life, and churches were often a central gathering place for the community. Cathedrals were the biggest churches in Europe and often took hundreds of years to build. Most cathedrals were built in the shape of a cross, the symbol of the Christian religion.

Around the year 1100 A.D., Europeans began building a new design of church called the Gothic style. Gothic churches had pointed arches and many more windows than older churches. The people of the time thought that light was a symbol of God and wanted buildings that were full of windows and light.

Medieval architects had to find a way to build walls that were strong enough to support the heavy stone roof of the cathedrals but still have enough windows for light to enter the church. These architects invented flying buttresses to help the walls carry the heavy roof. Flying buttresses were a type of support beam shaped like a stone arch that started at the top of the walls and reached the ground. Because the buttresses were helping support some of the weight, the walls didn't have to be able to support as much. Now there could be many windows in the walls and the cathedrals could be filled with light.

One example of a Gothic church with flying buttresses is the Notre-Dame Cathedral in Paris. "Notre-Dame" means "our lady" in French and the cathedral was devoted to Mary, an important figure in the Catholic religion. Notre-Dame was built in 1160 A.D. It was the first building in northern Europe where the roof was more than one hundred feet high. Notre-Dame's windows were made with beautiful stained glass that looked like jewels when the light shone through. It took more than one hundred years to build the entire cathedral. That means the people who began building the cathedral were never able to see the finished building.

The cathedral became famous when the novelist Victor Hugo wrote a novel called *The Hunchback of Notre-Dame* about Quasimodo, a fictional cripple who was a bell-ringer in the cathedral. Years later Walt Disney made a cartoon movie based on the book and the church was brought to life in drawings.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

1. What were the Egyptian pyramids built to be?

- A the homes of Egyptians
- B the site of ritual ceremonies
- C the tombs of pharaohs
- D Catholic churches

2. The passage describes buildings built by different civilizations. Which civilization(s) discussed in the passage built pyramids *first*?

- A the Mayans
- B the Egyptians
- C the Europeans
- D the Mayans and the Egyptians

3. Flying buttresses were crucial in the construction of medieval cathedrals. What evidence from the passage supports this conclusion?

- A The buttresses made it possible to have walls with many windows in them so that the cathedrals could be filled with light.
- B Gothic churches had pointed arches and many more windows than older churches.
- C The buttresses were a type of support beam shaped like a stone arch that started at the top of the walls and reached the ground.
- D Medieval architects had to find a way to build walls that were strong enough to support the heavy stone roof of the cathedrals.

4. Based on the passage, what can be concluded about the way the Mayans viewed the gods?

- A The Mayans did not care about the gods.
- B The Mayans deeply respected the gods.
- C The Mayans did not understand the gods.
- D The Mayans thought the gods were like the Mayans.

5. What is this passage mainly about?

- A the tallest buildings in the world today
- B the history of world religion
- C the ways you can build your own home
- D different buildings built by different civilizations

6. Read the following sentences from the passage: "The other pyramids the Maya built were **sacred** structures. These pyramids were built to honor the gods and were not supposed to be used by anyone."

As used in the passage, what does the word "**sacred**" mean?

- A set aside for a religious purpose
- B larger than anything else around
- C made for frequent public use
- D used only for large social gatherings

7. Choose the answer that best completes the sentence below.

Around the year 1100 A.D., Europeans thought that light was a symbol of God \_\_\_\_\_ they wanted to build churches that were full of windows and light.

- A because
- B however
- C but
- D so

8. Why did the Mayans build two types of pyramids?

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